

REMARKS

Claims 1-4, 8-12, and 16-21 are pending in the application; claims 5-7 and 13-15 being previously canceled.

On page 2, claims 1-4, 9, 10 and 12 were rejected under 35 U.S.C. §103(a) as being unpatentable over Soleimani et al. in view of Loke. In addition, on page 6, claims 8, 11, and 16-21 were rejected under 35 U.S.C. §103(a) as being unpatentable over Soleimani et al. in view of Loke and further in view of Dent et al.

The Office Action notes that the Soleimani et al. reference does not disclose “wherein the communication session is initiated by the reception of data or user initiated transmission of data, wherein said controller does not return the microwave low noise amplifier to full electrical power between communication sessions.”

Loke is relied upon for teaching that a “communication session is initiated at 204 by the reception of data or user initiated transmission of data by determining if there is a Tx/Rx mode; (col. 3, lines 44-51) wherein the controller does not return the microwave low noise amplifier to full electrical power between communication sessions at 206 by decreasing the LNA power (fig. 2; col. 3 lines 44-51).”

The Office Action then concludes that it would have been obvious to one of ordinary skill in the art at the time the invention was made to decrease the LNA power in order to save power to the LNA when there’s no communication session when there’s no receiving mode.

Applicants respectfully disagree. In particular, column 3, lines 44-51 of the Loke patent only disclose that if the transceiver is not in a receive mode then there is no need to increase the linearity of the LNA/mixer channel. Step 204 is not the initiation of a “communication session.” The Linearity Control signal is set to select a low IP3 LNA or decrease the LNA mixer channel bias current. Even if the system of Loke is not in a “receive mode” it does not mean it is not in a communication session, as recited in the claims of the present application. A purpose of the

Loke system is to limit the effect of interference. To do this Loke controls the linearity of a receiver in a radio frequency transceiver, and controls a third-order intercept point (IP3) value.

The portion of the Loke patent referenced in the Office Action only refers to steps 204, 206 and 208 shown in Fig. 2. The system does not determine if the transmission power is high until step 214.

In the present invention a communication session is defined as being initiated by the reception of data or user initiated transmission of data. Thus even if the VSAT terminal is not receiving a signal, a communication session may be ongoing if a user has initiated the transmission of data. Since Loke is concerned with interference between transmission and reception, step 204 only pertains to determining if power is being consumed for reception. Step 214 determines if power is above 20 dBm for transmission. Therefore, Loke does not teach providing "a less-than-full electrical power supply to said microwave low noise amplifier and operative to provide a full electrical power supply to said microwave low noise amplifier in the presence of a communication session, wherein said communication session is initiated by the reception of data or user initiated transmission of data" as recited in the claims of the present invention.

In addition, even if the teachings of Soleimani et al. and Loke could be combined, applicants submit that neither Soleimani et al. nor Loke provides any teaching or suggestion for their combination, and even if combinable would not produce the present invention as recited in the pending claims. Soleimani teaches turning the system on and off at regular pre-defined intervals. The system and method of the Loke patent is concerned with reducing interference caused by cross-modulation of the transmission signal envelope. The Loke system monitors the received signal strength information (RSSI), the true received signal strength (E_c/I_o), the transmit channel output power (Tx AGC), and the mode (either duplex mode or idle mode), and adjusts the third-order intercept point according to these signals to reduce interference.

Thus even if the teachings of Soleimani et al. and Loke could be combined, applicants submit that one of ordinary skill in the art would at most be taught to turn the system on and off at regular pre-defined intervals, as taught by Soleimani et al. and to check for interference caused

by cross-modulation of the transmission signal envelope and adjust the third-order intercept point. Applicants submit that there is not teaching in Soleimani et al., Loke, or their combination of providing "a less-than-full electrical power supply to said microwave low noise amplifier and operative to provide a full electrical power supply to said microwave low noise amplifier in the presence of a communication session, wherein said communication session is initiated by the reception of data or user initiated transmission of data" as recited in claims 1 and 10 of the present invention. Claims 2-4, and 9 depend from claim 1 and applicants submit that these claims are patentable for the same reasons set forth with regard to claims 1 and 10.

Applicants note while that claim 12 was rejected as being unpatentable over Soleimani et al. in view of Loke, claim 12 depends from claim 11, which was rejected under 35 U.S.C. §103(a) as being unpatentable over Soleimani et al. in view of Loke and further in view of Dent et al. Therefore, Applicants will treat the rejection of claim 12 as being based on Soleimani et al. in view of Loke and further in view of Dent et al.

Claims 11, 17, 18, 19, 20, and 21 all contain recitations similar to independent claims 1 and 10, i.e., providing a less-than-full electrical power supply to said microwave low noise amplifier, said communication session being initiated by the reception of data or user initiated transmission of data. Applicants submit that Dent et al. does not cure the deficiencies of Soleimani et al. and Loke, and therefore claims 8, 11, 12, and 16-21 are patentable over the art of record for the same reasons set forth previously with regard to claims 1-4, 9 and 10.

In view of the foregoing, Applicants reconsideration and allowance of the claims is respectfully requested. The present amendment is being submitted within the three month period for response to the outstanding Office Action. Applicants hereby petition for any fees required to maintain the pendency of this case, except for the Issue Fee, and such fee is to be charged to Deposit Account No. 19-0733.


If for any reason the Examiner is unable to allow the application on the next Office Action and feels that an interview would be helpful to resolve any remaining issue, the Examiner

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is respectfully requested to contact the undersigned attorney for the purpose of arranging such an interview.

Respectfully submitted,

By: 
Douglas W. Robinson
Registration No. 32,751

DWR/jlg

Banner & Witcoff, LTD
1001 G Street, N.W.
11th Floor
Washington, D.C. 20001-4597
Phone: (202) 824-3000
Fax: (202) 824-3100

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